

1] A vendor bought toffees at 6 for a rupee. How many for a rupee must he sell to gain 20%?

- A. 3
- B. 4
- C. 5
- D. 6

Answer: Option C

Explanation:

C.P. of 6 toffees = Re. 1

S.P. of 6 toffees = 120% of Re. 1 = Rs. $\frac{6}{5}$

For Rs. $\frac{6}{5}$, toffees sold = 6.

For Re. 1, toffees sold = $6 \times \frac{5}{6} = 5$.

2] The cost price of 20 articles is the same as the selling price of x articles. If the profit is 25%, then the value of x is:

- A. 15
- B. 16
- C. 18
- D. 25

Answer: Option B

Explanation:

Let C.P. of each article be Re. 1 C.P. of x articles = Rs. x.

S.P. of x articles = Rs. 20.

Profit = Rs. (20 - x).

$$\frac{20 - x}{x} \times 100 = 25$$

$$\begin{aligned} 2000 - 100x &= 25x \\ 125x &= 2000 \end{aligned}$$

$$x = 16.$$

3) If selling price is doubled, the profit triples. Find the profit percent.

- A. 66.67
- B. 100
- C. 105.33
- D. 120

Answer: Option B

Explanation:

Let C.P. be Rs. x and S.P. be Rs. y .

Then, $3(y - x) = (2y - x) \quad y = 2x$.

Profit = Rs. $(y - x) = \text{Rs. } (2x - x) = \text{Rs. } x$.

$$\text{Profit \%} = \frac{x}{x} \times 100\% = 100\%$$

4) A shopkeeper expects a gain of 22.5% on his cost price. If in a week, his sale was of Rs. 392, what was his profit?

- A. Rs. 18.20
- B. Rs. 70
- C. Rs. 72
- D. Rs. 88.25

Answer: Option C

Explanation:

$$\text{C.P.} = \text{Rs. } \left(\frac{100}{122.5} \times 392 \right) = \text{Rs. } \left(\frac{1000}{1225} \times 392 \right) = \text{Rs. } 320$$

$$\therefore \text{Profit} = \text{Rs. } (392 - 320) = \text{Rs. } 72.$$

5) A man buys a cycle for Rs. 1400 and sells it at a loss of 15%. What is the selling price of the cycle?

- A. Rs. 1090
- B. Rs. 1160
- C. Rs. 1190
- D. Rs. 1202

Answer: Option C

Explanation:

$$\text{S.P.} = 85\% \text{ of Rs. } 1400 = \text{Rs. } \left(\frac{85}{100} \times 1400 \right) = \text{Rs. } 1190$$

6) Some articles were bought at 6 articles for Rs. 5 and sold at 5 articles for Rs. 6. Gain percent is:

- A. 30%
- B. 33%
- C. 35%
- D. 44%

Answer: Option D

Explanation:

Suppose, number of articles bought = L.C.M. of 6 and 5 = 30.

$$\text{C.P. of 30 articles} = \text{Rs. } \left(\frac{5}{6} \times 30 \right) = \text{Rs. } 25.$$

$$\text{S.P. of 30 articles} = \text{Rs. } \left(\frac{6}{5} \times 30 \right) = \text{Rs. } 36.$$

$$\therefore \text{Gain \%} = \left(\frac{11}{25} \times 100 \right) \% = 44\%.$$

7) On selling 17 balls at Rs. 720, there is a loss equal to the cost price of 5 balls. The cost price of a ball is:

- A. Rs. 45
- B. Rs. 50
- C. Rs. 55
- D. Rs. 60

Answer: Option D

Explanation:

$$(\text{C.P. of 17 balls}) - (\text{S.P. of 17 balls}) = (\text{C.P. of 5 balls})$$

$$\Rightarrow \text{C.P. of 12 balls} = \text{S.P. of 17 balls} = \text{Rs. } 720.$$

$$\Rightarrow \text{C.P. of 1 ball} = \text{Rs. } \left(\frac{720}{12} \right) = \text{Rs. } 60.$$

8) When a plot is sold for Rs. 18,700, the owner loses 15%. At what price must that plot be sold in order to gain 15%?

- A. Rs. 21,000
- B. Rs. 22,500
- C. Rs. 25,300
- D. Rs. 25,800

Answer: Option C

Explanation:

$$85 : 18700 = 115 : x$$

$$\Rightarrow x = \left(\frac{18700 \times 115}{85} \right) = 25300.$$

Hence, S.P. = Rs. 25,300.

9) 100 oranges are bought at the rate of Rs. 350 and sold at the rate of Rs. 48 per dozen. The percentage of profit or loss is:

- A. 14.29% gain
- B. 15% gain
- C. 14.29% loss
- D. 15 % loss

Answer: Option A

Explanation:

$$\text{C.P. of 1 orange} = \text{Rs. } \left(\frac{350}{100} \right) = \text{Rs. } 3.50$$

$$\text{S.P. of 1 orange} = \text{Rs. } \left(\frac{48}{12} \right) = \text{Rs. } 4$$

$$\therefore \text{Gain\%} = \left(\frac{0.50}{3.50} \times 100 \right)\% = \frac{100}{7}\% = 14\frac{2}{7}\%$$

10) A man mixes two types of rice (X and Y) and sells the mixture at the rate of Rs. 17 per kg. Find his profit percentage.

- I. The rate of X is Rs. 20 per kg.
- II. The rate of Y is Rs. 13 per kg.
- A. I alone sufficient while II alone not sufficient to answer
- B. II alone sufficient while I alone not sufficient to answer
- C. Either I or II alone sufficient to answer
- D. Both I and II are not sufficient to answer

Answer: Option D

Explanation:

The ratio, in which X and Y are mixed, is not given.

So, both I and II together cannot give the answer.

\therefore Correct answer is (D).